

PROCEEDINGS OF THE BROWN COUNTY
LAND CONSERVATION SUBCOMMITTEE

Pursuant to Section 18.94 Wis. Stats., a regular meeting of the **Brown County Land Conservation Subcommittee** was held on Monday, May 23, 2016 in Room 161, UW Extension, 1150 Bellevue Street, Wisconsin.

Present: Supervisors Norbert Dantine, Bernie Erickson, Dave Kaster, Dave Landwehr, Tom Sieber,
Citizen Rep Jeff Ronsman

Also Present: Mike Mushinski, Jon Bechle, FSA Executive Director Zack Warner and other interested parties.

****Audio of the meeting is available by contacting the County Board office (920) 448-4015.***

I. Call Meeting to Order.

The meeting was called to order by Chairman Dantine at 6:00 p.m.

II. Approve/Modify Agenda.

Motion made by Supervisor Kaster, seconded by Supervisor Sieber to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

III. Approve/Modify Minutes of April 25, 2016.

Motion made by Supervisor Kaster, seconded by Supervisor Landwehr to approve. Vote taken. MOTION CARRIED UNANIMOUSLY

Comments from the Public

On behalf of the committee, Dantine welcomed Citizen Rep Jeff Ronsman to the Land Conservation Subcommittee.

1. Departmental Openings Summary.

Mushinski informed this was the same Agronomist position that they had open for a few months; they were hoping to get enough budgetary funds throughout the year to hire someone.

Motion made by Supervisor Erickson, seconded by Supervisor Kaster to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

2. Budget Status Report for April 2016.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

3. Director's Report:

a. Manure Irrigation Workgroup Update.

Program Manager Jon Bechle provided a handout (attached) which included a cover page, an executive summary and an overview of duties from the 120 page report re: Considerations for the use of Manure Irrigation Practices, a report from the Wisconsin Manure Irrigation Workgroup. This effort was started back in 2013 and the report was finished in March or early April. Bechle briefly went over the consensus baseline recommendations that came out of the effort, which included requirements in the current Brown County Animal Waste Ordinance. The ordinance and the 590 standard did not specifically address manure irrigation because it was fairly new to Wisconsin since the last time the standard was adopted. This report was to provide guidance; to serve as a resource for citizens and elected officials engaged in discussions about appropriate next steps for their

communities around the issue of manure irrigation. Bechle informed there were a number of towns across the state that had adopted ordinances which were listed in the full report. The Town of Scott back in Feb 2015 had enacted an ordinance prohibiting manure irrigation specific language in their ordinance. Their department had been contacted by at least two or three other towns that had been watching the progress of this workgroup and asking questions about what that meant for Brown County.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

b. Karst Area Issues – Groundwater.

Mushinski referred to the Kewaunee County issues stating Kewaunee County citizens filed a petition with the EPA formally requesting federal action to provide clean drinking water to Kewaunee County resident. He informed that Brown County was impacted by shallow soils and groundwater issues. The whole issue coming out of Kewaunee County was looking at the standards they had to protect groundwater and the workgroups in Kewaunee County are looking at standards that are more restrictive on manure spreading on shallow soils near sinkhole areas. The State of Wisconsin is opening up administrative rules that are going to apply to this in the next two to three years.

Responding to Erickson, Mushinski informed that they still did abandoned wells and had Department of Ag funds to do that. The numbers weren't great but they did provide assistance to abandoned wells.

Motion made by Supervisor Sieber, seconded by Supervisor Kaster to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

c. WDNR Fisheries Award – Presented May 26, 2016.

Mushinski informed their department was receiving the WDNR Fisheries Award; the State Fisheries Biologist will be present to present the award on Thursday, May 26th @ 11am.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to receive and place on file. Vote taken. MOTION CARRIED UNANIMOUSLY

Other

4. Such Other Matters as Authorized by Law.

Zach Warner from the FSA was present to introduce himself to the committee, the new County Executive Director for the Farm Service Agency. He worked for FSA in Kewaunee County for a dozen years; he lived in NE Brown County and was hired to serve for Brown and Outagamie. He had made contact with Mushinski about partnering on some CRP projects in the county and making FSA available to this committee.

5. Adjourn.

Motion made by Supervisor Landwehr, seconded by Supervisor Sieber to adjourn at 6:14 p.m. Vote Taken. MOTION CARRIED UNANIMOUSLY.

Respectfully submitted,

Alicia A. Loehlein
Recording Secretary

CONSIDERATIONS **FOR THE USE OF** MANURE IRRIGATION PRACTICES

Report from the Wisconsin Manure Irrigation Workgroup



Considerations for the Use of Manure Irrigation Practices

Report from the Wisconsin Manure Irrigation Workgroup

This informational report was developed by members of the Manure Irrigation Workgroup. The workgroup included invited participants representing a cross-section of interests concerned with the use of irrigation equipment to land-apply livestock manure or process wastewater by agricultural operations. Future public policy regarding manure irrigation would be made by state and local governments following appropriate public participation and input; this workgroup did not have that authority. This report is informational. The report is a group product, compiled and edited by Genskow and Larson with contributions and comments from all workgroup members and writing contributions from Borchardt, Craig, Baeten, Murphy, Struss, and Thiboldeaux. The report does not represent the views of any individual workgroup member, nor the views of any of the participating organizations.

Workgroup Members:

- Ken Genskow, University of Wisconsin-Madison & University of Wisconsin-Extension (chair/facilitator)
- Becky Larson, University of Wisconsin -Madison & University of Wisconsin-Extension
- Carrie Laboski, University of Wisconsin -Madison & University of Wisconsin-Extension
- Mark Borchardt, United States Department of Agriculture-Agricultural Research Service
- Andrew Craig, Wisconsin Department of Natural Resources
- Joe Baeten, Wisconsin Department of Natural Resources
- Pat Murphy, United States Department of Agriculture-Natural Resources Conservation Service
- Steve Struss, Wisconsin Department of Agriculture, Trade and Consumer Protection
- Rob Thiboldeaux, Wisconsin Department of Health Services
- Suzanne Gibbons-Burgener, Wisconsin Department of Health Services
- Gloria Smedema, Fond du Lac County Public Health
- Sarah Grosshuesch, Adams County Public Health
- Kenn Buelow, Dairy Farmer
- Jeff Sommers, Dairy Farmer
- Shelly Mayer, Dairy Farmer and Executive Director, Professional Dairy Producers of Wisconsin
- Jeff Polenske, Agronomist
- Dana Cook, Professional Nutrient Applicators Association of Wisconsin
- Lynn Utesch, Organic Farmer, Sustain Rural WI Network, and Kewaunee Cares
- Jim Vandenbrook, Wisconsin Land and Water Conservation Association

Past Workgroup Member: Todd Boehne, Wisconsin Department of Agriculture, Trade and Consumer Protection
Several regular attendees of workgroup meetings also contributed to this report, notably, Tucker Burch (US Geological Survey), and Sarah Koske (Wisconsin DHS).

Recommended Citation: Genskow, K.D. and R.A. Larson (eds.). 2016. Considerations for the Use of Manure Irrigation Practices: Report from the Wisconsin Manure Irrigation Workgroup. University of Wisconsin-Extension and UW-Madison College of Agricultural and Life Sciences, Environmental Resources Center. Publication Number ERC 001-16.

Please note that "Appendix C: Airborne Pathogens from Dairy Manure Aerial Irrigation and the Human Health Risk" is a stand-alone research publication authored by M. Borchardt and T. Burch. See recommended citation in Appendix C.

Executive Summary

The Wisconsin Manure Irrigation Workgroup was convened in Spring 2013 by University of Wisconsin-Extension (UWEX) and University of Wisconsin-Madison (UW-Madison) College of Agricultural and Life Sciences at the request of Wisconsin Department of Natural Resources (WDNR) and Wisconsin Department of Agriculture, Trade and Consumer Protection (WDATCP). The workgroup was asked to review a broad set of issues associated with manure irrigation and to develop guidance and recommendations for state agencies, local governments, and citizens seeking to understand this expanding technology. The workgroup has no formal authority to establish policy for any jurisdiction within Wisconsin. Any public policy action by local or state governments related to workgroup recommendations would involve appropriate public participation and input.

After hosting two public presentations and input sessions in May 2013, the workgroup met 16 times between July 2013 and September 2015. Throughout its duration, the workgroup maintained open channels for public input and comments through a website and email. Over this same time period, an independent but related study (funded by the WDNR and United States Department of Agriculture-Agricultural Research Service (USDA-ARS)) was being conducted to quantify the risk of illness associated with airborne pathogens from manure irrigation (summarized in Appendix C of this report). The timeline and results for that study influenced the timing of final conversations and recommendations from the workgroup.

The workgroup reviewed a range of issues for this report related to manure irrigation. Sections of the report identify the initial benefits and concerns around the practice that led to the workgroup formation, discussions of health and environmental risk, review of manure as a material, manure management, and existing rules and regulations associated with various aspects of manure irrigation. The report also provides descriptions for seven considerations for use of manure irrigation practices that drove workgroup discussion and provided information necessary for developing workgroup recommendations.

Decisions and recommendations made by the workgroup were based on a consensus seeking process. For many aspects of guidance and recommendations, the workgroup did achieve consensus. In particular, the workgroup reached consensus about recommendations for baseline conditions that should be in place if manure irrigation practices are used. The workgroup reached lower levels of agreement (near consensus or close-to-near consensus) for recommendations related to setback distances for different land uses under various combinations of conditions (such as wind speed, wind direction, etc.).

Consensus baseline recommendations for all uses of manure irrigation practices are that operators must:

- Follow all existing relevant state and local laws regarding animal waste and nutrient management
- Have and follow a NRCS CPS 590 Nutrient Management Plan
- Take appropriate steps to minimize drift
- Ensure no overspray of irrigated manure
- Have suitable means of supervising/controlling the equipment (e.g., active supervision, automatic sensors/controls, etc.)
- Have suitable means of determining relevant weather information (to include: wind speed, wind direction, and temperature)

- Have means of preventing contaminated backflow if equipment is connected to water sources
- Ensure that no human waste or septage is added to (or processed with) the manure.

Additional recommendations apply depending on whether and how the manure is processed. Those include issues related to time of day, wind speed, total number of applications per year, and equipment (such as nozzles that produce larger droplet sizes).

Recommendations for setback distances generally do not reflect consensus among all group members. Setback distance refers to distance from the edge of the area wetted by irrigated manure. For forests, adjacent agricultural lands, and road right-of-way wetted perimeter could be at the property line.. Minimum setback distances of 100 feet were recommended (at near consensus or close-to-near consensus) for property lines of public recreational areas, including property lines for schools or playgrounds, and distances ranging from as high as 750 feet to as low as 250 feet (with additional conditions) for dwellings and occupied buildings. In all cases, setback distances to an occupied building would take precedence over setback distance to a property line. The full set of baseline conditions and setback distances are described in Chapter 5, along with degree of consensus.

This report represents a compilation of science and knowledge vetted through the varied perspectives of work-group members. The workgroup had limited resources and did not have the capacity to perform comprehensive reviews related to some emerging areas of science that have been identified as concerns for manure irrigation. For the issues discussed, the emphasis was placed on understanding additional risk incurred when land application of manure is conducted with irrigation practices in comparison to conventional manure application practices. As noted, this report does not establish policy for any jurisdiction in Wisconsin. It is intended to serve as a resource for citizens and elected officials engaged in discussions about appropriate next steps for their communities around the issue of manure irrigation.

Understanding Manure Irrigation

Cooperative Extension

Webinar #1

Report Introduction and Overview Webinar, recorded Thursday, April 14, 2016

Manure Irrigation Workgroup Webinar Recording from April 14, 2016



Download April 14 Webinar Slides (PDF 3MB)

The recorded webinar includes presentations from three of the workgroup members: Ken Genskow (UW-Madison/UW-Extension), Becky Larson (UW-Madison/UW-Extension), and Mark Borchardt (USDA-Agricultural Research Service). The webinar contains approximately 45 minutes of presentations, followed by 30 minutes for questions submitted by webinar attendees through the webinar platform.

Please note: The purpose of the webinar on April 14th was to provide an overview of the report and workgroup activities. A second, follow-up webinar will be scheduled for the week of May 16 to address questions people have about the report after they have had time to read it. Comments and questions for the second webinar may be submitted on and after April 14th.

Expanded presentation by Dr. Mark Borchardt (approximately 50 min.)

Manure irrigation airborne pathogen health risk

Expanded Presentation by Dr. Mark Borchardt - Manure irrigation airbor...



Webinar #2**Response to Questions and Comments about the Report, recorded Monday, May 16, 2016**

The second webinar addressed questions and comments regarding the Manure Irrigation Workgroup report published April 14, 2016.

MIW Webinar 2**About the Workgroup**

University of Wisconsin-Extension and UW-Madison convened a Manure Irrigation Workgroup at the request of the Department of Natural Resources and the Department of Agriculture, Trade and Consumer Protection to review issues and develop guidance on *the practices of applying livestock manure or process wastewater through irrigation equipment* – referred to as “*manure irrigation*.”

The **workgroup** was composed of scientists, public health specialists, state agency experts, farmers, and others intended to bring a diverse set of perspectives to the issue. The workgroup met between July 2013 and September 2015 to explore benefits, concerns, and remaining questions associated with manure irrigation. The group had no formal authority, and its work does not establish policy on manure irrigation.

The navigation tabs at the top of the page provide more information about the **workgroup activities**, **presentations from meetings in 2013**, **benefits and concerns** associated with manure irrigation, additional **resources**, and information about how to **share your comments**.

Understanding Manure Irrigation is part of the **University of Wisconsin-Extension For Your Information Network**.

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